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Chee et al.

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[54] **VASOOCCULSION COIL WITH ATTACHED FIBROUS ELEMENT(S)**[75] Inventors: **U. Hiram Chee, Palo Alto; Mike Mariant, Santa Clara, both of Calif.**[73] Assignee: **Target Therapeutics, Fremont, Calif.**

[\*] Notice: The portion of the term of this patent subsequent to Jul. 13, 2010 has been disclaimed.

[21] Appl. No.: **956,724**[22] Filed: **Oct. 2, 1992****Related U.S. Application Data**

[63] Continuation-in-part of Ser. No. 771,013, Oct. 2, 1991, Pat. No. 5,226,911.

[51] Int. Cl.<sup>5</sup> ..... **A61B 17/00**[52] U.S. Cl. ..... **606/191; 606/198; 604/104; 604/52; 623/11**[58] Field of Search ..... **606/191, 198, 194, 200; 604/52, 53, 104, 105, 106; 623/1, 11, 12**[56] **References Cited****U.S. PATENT DOCUMENTS**

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[57]

**ABSTRACT**

A device for occluding a blood vessel comprising a helical metal coil having at least one fibrous element attached to its proximal end wherein the fibrous element(s) extends in a sinusoidal wave configuration, the loops of which extend about individual windings at spaced intervals along the axis of the coil.

**16 Claims, 3 Drawing Sheets**